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Published in:
International Journal of Design

Publication date:
2019

Document Version
Publisher's PDF, also known as Version of record

An Architecture of Design Doing: *A Framework for Capturing the Ever-evolving Practice of Design to Drive Organizational Learning*

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Modern design organizations need to continuously develop how they innovate in response to a changing innovation landscape. Developing methodology based on best practices is a powerful way to do so. However, there is currently no structure for developing methodology in a way that is (1) consistent and flexible, (2) user-centered, and (3) aimed at learning and continuous development of the methodology and the practice it supports. This paper presents a framework designed to support the development of a methodology toward meeting these aims and functions as an *architecture for design doing* (ADD). The framework promotes action at two levels: 1) it captures best practices that are transferrable to other projects and contexts, and 2) it encourages individuals to identify and apply values, principles and processes relevant to daily practice. It also supports the co-creation of methodology by multiple stakeholders. We illustrate the application of the framework with a case of the Philips Customer Decision Journey methodology.

Keywords **–** Design Methodology, Best practices, Organizational Learning.

Relevance to Design Practice **–** The ADD framework supports design organizations by capturing and communicating their best practices in a designer-friendly and accessible way. As a result, practices are captured more accurately, in more detail, and in a more consistent manner—facilitating and speeding up organizational learning.

Citation: Daalhuizen, J., Timmer, R, van der Welie, M., & Gardien, P. (2019). An architecture of design doing: A framework for capturing the ever-evolving practice of design to drive organizational learning. *International Journal of Design, 13*(1), 37-52.

"We shape our tools and thereafter our tools shape us"
MARSHALL MCLUHAN

Driving Innovation in a Modern Design Organization

Successful innovation requires modern organizations to balance agility and flexibility with effective organizational learning across projects (see e.g., Cooper & Sommer, 2016; Rigby, Sutherland, & Takeuchi, 2016). Organizations operate in a continuously changing context, where innovations no longer operate in isolation, but instead need to interact with and fit into ecosystems of interconnected products and services (Ceschin & Gaziulusoy, 2016; Knutsen, 2014; Tukker & Tischner, 2006) that are in constant flux (Gardien et al., 2016). This requires firms to continually develop, share and adopt new ways of working, posing a challenge to their innovation management capabilities as they need to be flexible and dynamic (Francis & Bessant, 2005). Sharing and adopting such best practices when they turn out to be successful is an important dynamic capability (Eisenhardt & Martin, 2000) in itself and critical for an organization's success and competitive edge. In this light, it is paramount for design leadership to facilitate the maturation and adoption of those practices across the organization. To do so, best practices need to be documented and shaped into methodology. Methodology in design is defined as a (system of) method(s), way of working or problem solving approach (Roozenburg & Eekels, 1995); a design method is defined as a formalized representation of a design activity that functions as a mental tool to support designers to (learn how to) achieve a certain goal, in relation to certain circumstances and resources available.

New ways of working often emerge out of innovative projects in industry and also from university research efforts and are typically turned into methodological form. The resultant methodology, however, bears the risk of becoming static and disconnected from its intended context of use (Daalhuizen, 2014). In fact, the founding fathers of the 1960's method movement in product development expressed this concern, noting the method movement produced more and more static methodology that overemphasized deliberate thinking processes (Alexander, 1971) and ignored the important role of intuition in design (Jones, 1977).

Received November 18, 2016; **Accepted** March 25, 2019; **Published** April 30, 2019.

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Methodology can easily be perceived as an ends in itself, rather than as a means to support practitioners to, for example, enhance their performance, adopt a new way of working, or to make their performance more consistent across projects. In the emerging context as described above, the development of appropriate methodology itself has become progressively more complex because the role of design itself is developing (Bowen, Durrant, Nissen, Bowers, & Wright, 2016), the speed of development is becoming more and more crucial (e.g., Haines-Gadd et al., 2015), and innovators need to assume a system's perspective. As design methods are being used across organizations and disciplines in efforts to be co-creative, they need to be made to fit organizational values and principles, innovation processes, other methods and tools as well as the organizational context.

In an industry-university collaboration, Philips Design, Technical University of Denmark and Delft University of Technology developed a framework for capturing, documenting, and sharing design methodology in a rich format with the aim to create methodology that is (1) consistent and flexible, (2) designer-centered, and (3) aimed at learning and continuous development of the methodology. We define a framework as an analytical tool that is used to make conceptual distinctions between elements that are observed in the messy reality of everyday practice. In this sense, a framework ought to help organize methodological elements in a coherent way. In the case of design methodology, a good framework enables researchers and practitioners to capture something real that is easily adapted and applied. In a sense, a good framework acts as an architecture that helps researchers and practitioners to capture, express *and adapt* design activity and processes continuously and in a consistent way, resulting in methodology that fulfils the three abovementioned aims.

The paper presents a framework for capturing and expressing design practices that allows for distinction between method elements in a way that allows them to be linked to organizational context and to be added or substituted over time without the need to completely re-develop the methodology. This framework also outlines operational procedures and principles that allow for the systematic co-creation of methodology amongst diverse stakeholders.

Jaap Daalhuizen is Assistant Professor in the Department of Management, Technical University of Denmark. His research focuses on design theory & methodology and innovation processes, with a particular focus on the development and use of methods in relation to human behavior and organizational context. His research on design methods has a diverse range of application areas, for example in health innovation and behavioral design and agility in the manufacturing industry. He has published in o.a. *Design Studies* and *International Journal of Design* and is co-editor of the Delft Design Guide.

Remco Timmer works with many different companies in many industries to identify and develop new product and service propositions, always based on a deep understanding of the business context and insight into their consumers. He believes in open innovation and collaboration in multidisciplinary teams, with close end-user involvement. Remco enjoys complex system innovation projects where the visualization, communication and creative power of design contributes to the development of a truly innovative synergy—the radical solution. His work always delivers an improvement in sustainability of a companies' offer from a triple P perspective, which is: People, Planet and Profit. Sustainability is an inherent quality of meaningful and appropriate innovation and of good design.

Martijn van Welie is a digital innovation professional that combines both technical and design skills/knowledge. He has a strong focus on product development, software engineering, user experience, and design strategy with more than 15 years of experience. Delivering great user experiences for online services or apps is where his heart lies, but great experiences only become great if a good design also gets properly implemented. Martijn uses his knowledge of both software development and design to come to implementable solutions that have a great user experience. A good user experience is no accident and is the result of a well thought through strategy and a design that makes the strategy come true. In the end everything needs to come together, and that is what he does.

Paul Gardien is as member of the Philips Design Board responsible for both the strategic development of the global design function and the Design Research & Innovation program. In his strategy role, he has been instrumental in transforming Philips Design from a service unit into a global function. The Design Research & Innovation program creates new design competences, future visions and new propositions for Philips, and he has won numerous awards. Paul has spent his entire professional career at Philips Design, working in many different areas ranging from product-, multimedia- and internet design, to different management and development functions. He is TU/e University Fellow, and has been a member of various boards, including CLICKNL, Research Advisory Board of the Delft University of Technology in the Netherlands and juried in multiple renowned design competitions. He's also a frequent speaker at international design and innovation conferences. Paul studied industrial design engineering at the Delft University of Technology and holds a PhD in Design Innovation from the Eindhoven University of Technology.

Anticipating the Evolution of Value Creation

Organizations need to continuously evolve and disrupt their way of working as they respond to and anticipate a changing innovation landscape (Hussain, Sanders, & Steinert, 2012; Postma, Zwartkruis-Pelgrim, Daemen, & Du, 2012). As paradigms for economic value creation shift over time for design practice (Heskett, 2009), the underlying assumptions about what constitutes value and how and with whom value ought to be created shift as well (Brand & Rocchi, 2011; Gardien et al., 2014). Organizations typically develop new ways of innovating through champions who work on projects that are at—or sometimes even over—the edge of what the organization is currently capable of or comfortable with. Typically, these champions have seen glimpses of a paradigm shift towards new ways of value creation, and then direct their efforts to develop propositions that are able to capture new value. As part of their efforts, they often innovate new processes, creating new best practices that can light the way for others.

How do economic paradigms change? And in what way do they require practitioners to rethink their way of working? Since the start of the industrialization, four distinct paradigms of value creation have been recognized (Brand & Rocchi, 2011; Gardien et al., 2014). First, the *Industrial Economy* emerged, driven by forces of labor division, mass production, and consumerism. It was an age of strong belief that institutions and technology could create a better future. The main focus was to offer functional products that could modernize people's lives. Then, as urbanization changed the ways people lived and people's traditional identities were more or less dissolved, a new paradigm emerged. In the *Experience Economy*, companies started to create lifestyle brands that, through the consumption of their products and services, could fill the void left by loss of identity that many people experienced. The Experience Economy offered products that attracted consumers with shared mindset and aspirations. Then, in the wake of the devaluation of brands and the emergence of the internet, the end-user took power and a third paradigm emerged. The *Knowledge Economy* is

characterized by a situation in which the tools for value creation no longer solely belong to corporations but are also in the hands of everyday people. Transparency and critique are reaching levels never seen before. Interest and trust in brands is no longer fostered through advertising, but is more and more achieved through peer-to-peer opinion. Offerings from the Knowledge Economy use scaling platforms to enable the democratized production of value and identity. Yet with the democratization of value creation, the role of businesses comes under question. On top of that, the Knowledge Economy paradigm has facilitated a huge surge in awareness of large issues like quality of life and sustainability. As a consequence, a new paradigm is emerging. The *Transformation Economy* is characterized by multi-stakeholder collaborations that are organized around complex issues on a social and environmental level (Sangiorgi, 2011). Value creation in this paradigm is starting to happen through new business models that leverage stakeholder cooperation. Social innovations and ventures are now turning work on those challenges into business opportunities.

In response to this continuously changing business environment, assumptions about how to create value must change to keep pace. This is recognized in Philips as well. Philips is a company that was founded in the Industrial Economy, transitioned into the Experience Economy, and is currently a player in the Knowledge Economy. With each change in paradigm, Philips has evolved the role of design in its innovation processes and incubated the new ways of working required to succeed.

Transforming the Way Companies Innovate

When developing new ways of working, larger organizations need to balance organizational learning with agility and flexibility. On the one hand, newly developed best practices need to be captured, shared, and adopted across the organization in order to empower fast and efficient learning. On the other hand, methodology that transfers best practices needs to be practical and adaptable for the professionals working with them. In real-life projects, methodology almost always needs to be adapted in response to specific resources, circumstances and goals. Moreover, in order to have a decent chance of being taken up by practitioners, methodology needs to go beyond explaining *what* steps might be useful to take by explaining *how* those steps might be taken and *why* those steps are relevant to take (Hekkert, & Van Dijk, 2011).

Turning best practices into methodology also comes with risk. Both in development and use, methodology has the danger being interpreted as a rigid template—as a set of rules that are to be applied without regard to the characteristics and circumstances of the specific situation—without appreciating the need to continuously change an organization's way of working. In fact, much of the methodology in the field of design has struggled with this problem since its early days and up to the present (Alexander, 1964; Araujo, Benedetto-Neto, Campello, Segre, & Wright, 1996; Dorst, 2008; Daalhuizen, 2014; Jones, 1992). One reason for this is design methodology's focus on the design process: a method often describes phases and steps to be taken (the '*what*' of design activity) while ignoring the business values, principles and context in which the method is to be used in (Dorst, 2008; Daalhuizen, 2014). In particular, the crucial role of the user of the methodology has been ignored, with methods often failing to support designers in their adoption, staging and managing of its application in real projects. Thus, a key challenge in developing capabilities that fit the upcoming paradigms is to develop methodology that links values, principles, methods and best practice cases to capabilities in practice (Gardien et al., 2016). For example, the need to integrate knowledge from more disciplines requires new forms of collaboration, posing challenges to current methodology, which has often been developed for a mono-disciplinary audience (Kim & Kang, 2008). Such a challenge requires both deep knowledge of design theory and methodology (typically an *academic* asset) and detailed cases and expertise in nurturing new capabilities in practice (typically an industrial asset).

Another challenge in creating methods is how to indicate scale of application. Considered from the dimension of time, scale of application refers to methodology that is applicable for a one-hour briefing as well as for multi-year innovation programs. Scale of application can also be *stage-based*, including methods applicable to early stage framing of a roadmap to the delivery of products to market. Therefore, it is critical that methodology address the dual need to be flexible in staging and managing individual projects, while maximizing learning across projects. This raises the following questions:

- How can best practices and/or existing methodology be structured in a consistent way that facilitates their effective documentation, adoption, and use?
- How can that be done whilst facilitating their flexible use?

In the next sections, we first describe how we framed the concept of methodology, then we go on to describe the ADD framework itself and illustrate its use with a case on the Philips Design Customer Decision Journey methodology. We conclude the paper with a discussion of the limitations and main contributions of the work.

Framing the Role of Methods

From a practical perspective, design methodology has long been associated with capturing best practices in industry and turning them into methods that can be used by others (see Archer, 1965, for an early example). From an academic perspective, design methodology constitutes the study of methods in design, and focuses on modeling design activity and processes and turning them into methods with prescriptive power (see Finger & Dixon, 1989, for an early discussion on this topic). Roozenburg and Eekels (1995) capture this duality in their definition of design methodology as being both the study of methods—their description, explanation and valuation—and as something that is used to indicate a (system of) method(s), way of working, or problem solving approach. For example, the term design methodology is used to point to a specific set of methods such as *the TRIZ methodology*. In this paper we will use the term *methodology* to indicate a system of methods, a way of working,

or an approach to solve problems and/or create designs. When we refer to the study of methods, we will use the term *the field of design methodology*.

Design methods have sustained rather serious criticism throughout the history of the field of design methodology, and most of the criticism has been aimed at the disappointing uptake and use in industry (e.g., Albers, Sadowski, & Marxen, 2011; Andreasen, 1991; Andreasen, 2011; Araujo et al., 1996; Cross, 1993). A key reason for this is the lack of attention to the designer as user of methods (Daalhuizen, 2014) and context of use (Dorst 2008) of methods during their development, particularly in academia. From the perspective of industry, a lack of fit between how methods are typically described and the organizational context has caused disappointingly low uptake (Araujo et al., 1996). For example, on the level of the individual designer, methods are typically perceived as too complex and difficult to use (Araujo et al., 1996; Birkhofer, Kloberdanz, Berger, & Sauer, 2002; Cantamessa, 1999). In terms of presentation, methods are currently often lacking as well. For example, many methods have an unappealing form, and are often described in rather abstract or academic language that is not appropriate for use in practice (Araujo et al., 1996; Frost, 1999; Jänsch, Weiss, & Birkhofer, 2006). As a result, the need for collaboration between academic and industrial partners is greater than ever before (Davis, 2008). Partnerships between industry and universities facilitate the development of more complex eco-systems of methods, benefitting from the assets that each partner can bring. An example of such collaboration of networks is the *Academic Creative Lab* (see Gardien et al., 2016). Such a collaboration facilitates, for instance, the development of an ecosystems of methods that is both academically rigorous and broadly valid, as well as applicable and usable to industry across a broad set of circumstances and users.

How Does Methodology Impact Designers?

A basic condition for the successful application of a method is that a designer can understand and produce the same or similar behavior as the methodologist interpreted from the best practice or intended design behavior (Andreasen et al., 2015). Attaining a good understanding of a practice and how to enact it is not straightforward. It requires the designer to understand not only the method's steps but also develop an appropriate mindset (Andreasen, 2003; Andreasen et al., 2015; Daalhuizen, 2014) and understanding of the method's fit to the context of use. In many cases, methods are conceptualized as instructions to be followed systematically (see e.g., Stetter & Lindemann, 2005), rather than optional heuristics that a designer uses to support and control his or her way of working (Bender & Blessing, 2004). It has been argued that design methodology functions as a *mental tool* that impact design practice through the designer's mind (Daalhuizen, 2014). By applying the mindset and tools, those designers impact design processes. In turn, designers' activities in design processes shape design outcomes. These three steps describe the way a method can have its intended effect, as is illustrated in Figure 1.

Yet this is not how the impact of methods is typically

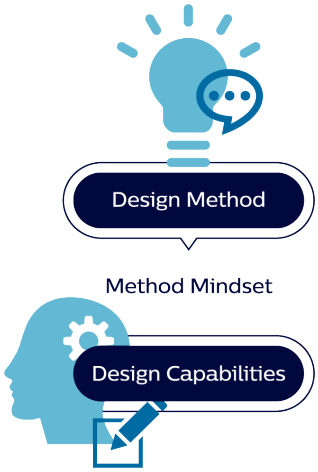

Figure 1. Linking design methods to capabilities in practice through the concept of *method mindset*.

conceptualized in the literature. In many cases, the designer is left out of the equation and methods are believed to impact the outcome directly–almost "like a road that can be followed" (Jensen & Andreasen, 2010, p. 3). Stetter and Lindemann (2005, p. 448) illustrate this point quite well when they discuss the impact of methods on product development:

> "To evaluate the impact of a method implementation essentially means to determine the effect of the methods, tools and strategies on the product development process"

This quote illustrates the frequently made assumption that there is a direct link between method and process, overlooking the pivotal role of the designer in *between* (Badke-Schaub, Daalhuizen, & Roozenburg, 2011, Daalhuizen, Person, & Gattol, 2014; Dorst, 2008) .

Methodology is thus more than a description of the steps one might take to go from A to B. Methodology, in a modern view, is about transferring best practices or new ways of working so as to help other people understand and apply them in their own work, or even add to those practices based on their own learning. This viewpoint takes a *user-centered* perspective of methodologyby placing the designer at the center of attention (see e.g., Badke-Schaub et al., 2011). According to a user-centered perspective, methodology should serve designers and researchers to share, learn, and develop ways of working *efficiently* across or even beyond organizations in a *flexible* manner. "Efficient" refers to best practices that can be shared in a way that is fast, scalable and location-independent. This is in contrast to how information is traditionally shared between master and apprentice, which has been common for skill-based professions including design (Alexander, 1964). "Flexible" refers to the transformation of best practices into methodology in a way that facilitates adaptation by design practitioners to a specific project, as well as continuous learning and development within a community of practitioners. For example, a specific practice such as *customer decision journey mapping* (see e.g., Court, Elzinga, Mulder, & Vetvik, 2009; Edelman & Singer, 2015) that has been developed by

designers in one setting can be captured to allow other designers to learn about that practice at the time and place of their choosing. Documentation of that practice should facilitate understanding and reinterpretation, as opposed to blindly following instructions. This would lead to the continuous improvement of the practice rather than it becoming a rigid set of rules.

We have framed methodology as a means to transfer practices across space and time between professionals and/or academics in an efficient and flexible way. Yet methodology risks *over-rationalizing* design activity, which has been long been acknowledged (Alexander, 1971; Jones, 1977). What does this mean for how methodology should and should not be perceived? Table 1 below outlines some answers to these questions.

An Architecture of Design Doing

So far, we have argued why there is a need for a richer, user-centered approach to capturing and documenting design practices and turning them into methods. The Architecture of Design Doing (ADD) is our proposed framework for achieving this. The purpose of ADD is to support practitioners and researchers with capturing and describing best practices in a coherent and consistent way, while keeping a focus on prospective users of the methodology and making sure that the context-sensitive nature of methods is kept intact. Through this process, organizations can better manage their dynamic design capabilities, facilitate organizational learning and increase their competitiveness.

When using the framework, elements of the method are organized along the flow of use that would happen on a typical project. The elements are presented in a large poster format to visually connect elements such as values, process steps, methods, tools, and examples (see Figure 2 for a schematic overview). This helps designers to gain an overview of the practice, go in depth with specific steps, and to adapt bits of the methodology to their specific circumstances. This presentation helps designers compare the method to current practices, identify elements of the method, and review elements according to their level of abstraction and use. The primary audience for ADD is product developers, design managers, and researchers. However, product managers, marketing professionals, and other stakeholders in the innovation process may find value in it as well.

The ADD framework also supports the co-creative development and documentation of methodology by practitioners and researchers. It accomplishes this by facilitating collaboration among a diverse group of stakeholders to deconstruct, synthesize,

Table 1. Illustration of goals that should and should not be strived for when documenting methodology.

Documenting methodology is about	Documenting methodology is not about
Demystifying the design process	Eliminating creativity/intuition from design
Inspiring new ways of working	Complicating existing ways of working
Creating a common language (Lingua Franca)	Fixating on jargon
Welcoming contribution	Claiming exclusivity of a domain
Consolidating best practice	Making the expert superfluous
Helping to scope or plan budgets more accurately	Calculating the budget exactly
Harmonizing an approach across the organization	Prescribing how everyone should work
Raising the base level of quality of work (limit variance)	Predicting outcomes
Enabling reuse of work across projects	Creating a rigid set of rules

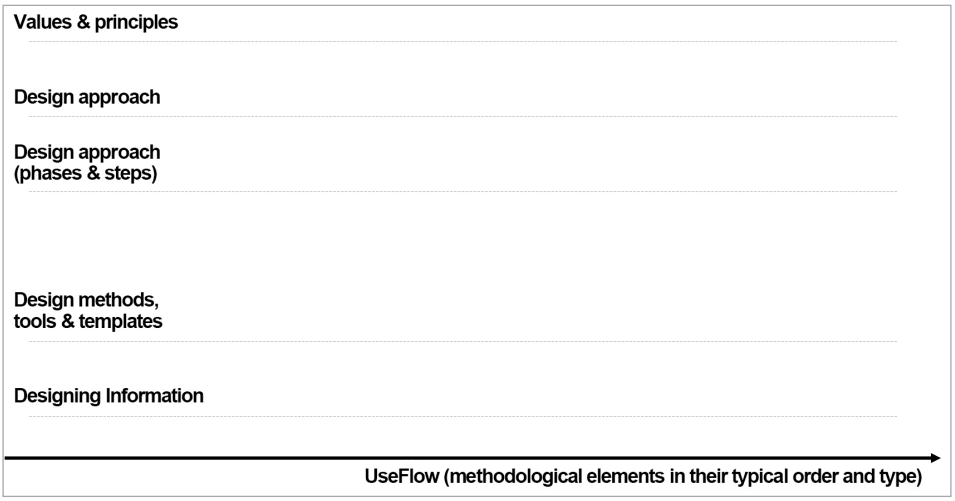

Figure 2. A schematic visualization of the different methodological elements along a flow of use.

and optimize a practice in a step-by-step and visual manner with content linked to the context of the practice and the mindset that drives it. Stakeholders can gather around a large poster and synthesize, change, and discuss the way the practice is presented. The framework opens the door for this process, but the experts involved in the practice are in the driver's seat and determine its outcome.

Additionally, the ADD framework promotes *rich* documentation of best practices on different levels of abstraction, including values and principles that indicate general direction and purpose for a way of working. They determine the style of working up to and including the very concrete staging information that helps to apply and adapt methodology to a specific context. The more abstract the information is, the more stable it is when applied to different projects and contexts. This rich way of describing a practice has additional benefits. For example, it ensures that a connection is made and explicated between the methodology and the organizational and project context in which it is used. This connection ensures that a methodology is explicitly linked to the organizational context, making a mismatch likely to be noticed and discussed. Moreover, process descriptions and methods are linked to the practical project context. This connection ensures that a methodology is explicitly linked to practical considerations and examples related to its application. Furthermore, practitioners can learn about the methodology using various learning strategies. For example, one might start with looking at practical examples to gain a grounded understanding of the methodology, while another might start with the process description to gain a general overview.

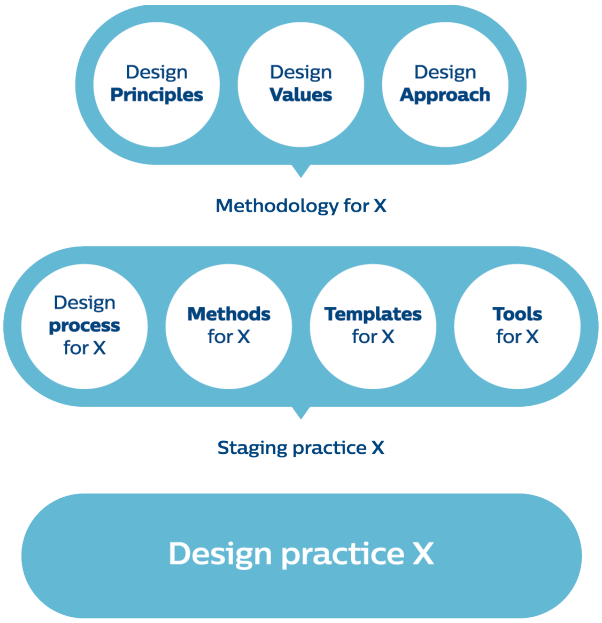

Figure 3. The architecture of design doing (ADD).

The ADD framework distinguishes methodological elements at different levels of abstraction, as depicted in Figure 4. In documenting a specific practice—practice 'X'—the methodological elements are mapped with the help of experts that have championed and/or have been frequently involved in the practice. By distinguishing elements on different levels of abstraction, the practice is captured in a rich way that supports effective and flexible use. The top of the pyramid is quite stable and only subject to change if the business paradigms change (for example, such as the shift from an experience economy to a knowledge economy) or if there is a difference in application (e.g., consumer applications or medical devices). The bottom of the pyramid can change from project to project or even from day to day. For example, values and principles are typically very stable and will remain relevant for longer periods of time and across different projects. Staging information is typically of a more changeable nature and originates directly from a reality that is always in flux. This is why staging information is so efficient in helping designers adapt methods to their specific circumstances, as it provides very *hands-on* insights into the application of a methodology.

From a practical perspective, the distinction between methodological elements is also purposeful. When trying to capture and describe practices, practitioners often struggle to organize the vast amount of disparate bits of knowledge and information and gather the core elements that should make up the method. This process of sense making (see e.g., Kolko, 2010) is aided by the ADD framework, as it offers a set of working definitions for different types of methodological elements. These can help to organize large sets of diverse information about a practice and make synthesis of a method more straightforward.

Defining Methodological Elements

In the design literature, there is little agreement on how to define key concepts related to methodology. For the concept of *method* alone, there are many definitions used, often serving the purpose of specific research aims. For example, Araujo (2001) analyzed 19 different definitions of the term method, originating from diverse sources. Two *founding fathers* of design methodology offer definitions of method which distinctly show this diversity: Jones defined methods as, "attempts to make public the hitherto private thinking of designers" (Jones, 1992, p. 45). Hubka defined the term, "Design method is any system of methodical rules and directives that aim to determine the designer's manner of proceeding to perform a particular design activity, and regulate the collaboration with available technical means, assuming a 'normal' engineering designer, 'normal' technical knowledge, and certain 'normal' environment conditions" (Hubka, 1983, p. 17). Jones defines method as something that emerges from designers' cognition and follows their natural thinking patterns. In contrast, Hubka emphasizes the prescriptive nature of methods being imposed on designer's behavior. As the literature does not offer an unambiguous framework for working with the different concepts of design methodology, an emergent approach was used to arrive at a consistent framework for describing elements of methodology. An initial set of definitions of methodological elements, presented in this section, was defined and then adjusted to improve clarity and reduce ambiguity once collected information was analyzed and organized.

Design Principle

A design principle is a generic rule for design behavior that dictates a style of working for a certain practice or phase in a practice. For example, the principle *be people centric, because we are genuinely interested in their opinions, thoughts and behaviors and want to provide meaningful solutions to their needs* refers to a style of working in which one always acts with (end)-users in mind, asking whether a decision will maximize value for people. This definition is rather close to Hubka's (1983) concept of working principle, described as single elements of methods that describe appropriate behavior for certain situations, like for example a desire for minimum manufacturing cost at all times. We note however, that Hubka defined working principles to be subordinate to methods, as to him a method consists of *working principles*. In contrast, in the ADD framework, we define principles are more general rules for behavior, that might span across methods. In this sense, design principles can be seen to connect methods together that fit the same design principles. As such, there might be a range of methods that fit to the design principle of *be people centric*.

In practice, design principles are subject to change, and they typically change along with the change of business paradigms. To illustrate this, we describe the different design principles that have entered into design practice as the business context evolved along the paradigms of value creation described earlier (Table 2).

Design Value

A design value is a generic statement for judgment in design that dictates or directs the decisions being made. For example, the value *we serve the user's concerns* helps to prioritize when making decisions, for example by making clear that the user's concerns are more important than exploiting all technological possibilities when designing a product. Design values are different from principles as the former describe what has more value in the context and can aid decision making, while the latter inform a style of working, similar to how general etiquette rules inform one about how to behave in given contexts. This distinction is also perceived to be relevant by practitioners in Philips.

Design values are typically linked to brand values in order for the brand character to really radiate through in the design touchpoints. For example, Brand and Rocchi (2011) articulated the evolution of major values that drive different paradigms of value creation: from a focus on making new products for the average household in the industrial economy paradigm, to delivering specific experiences to people in the experience economy, all the way through to enabling self-development and ethical value exchange in a transformation economy.

Design Approach

A design approach describes a generic structure of design projects. As such, it describes basic activities that constitute any meaningful act of design. For example, the *4D* model of *Discover, Define, Design, Deliver* (Design Council, 2005) describes the structure for any design activity at Philips Design on a high abstraction level as well as at a practical level. That is, a design approach is iterative and can describe the structure and stages of a multi-year program, and can also describe the structure of a two-hour workshop in which a team runs through one *4D* loop. The generic structure of design activity has long been recognized and documented in the literature (Roozenburg, 1993; Roozenburg & Cross, 1991). Even though different authors have not always agreed on the resolution level and have defined different numbers of steps, a consensus has emerged (Roozenburg & Cross, 1991). The fact that this generic structure permeates design activity on different levels of abstraction has been explicitly described as well (Roozenburg & Eekels, 1995).

Design Methodology

A design methodology is defined as a coherent set of values, principles, process, methods and tools and staging elements that encompass a certain way of working. This is in line with the discussion of Roozenburg and Eekels (1995) on what constitutes *prescriptive design methodology*. In this sense, design methodology is intended to support the learning, staging, managing, and/or performing of specific design practices. For example, a methodology might support practitioners with the practice of making a *customer decision journey* in order to enhance the innovation process.

Design Process

A design process describes the abstracted phases and steps for a specific design practice intended to provide a comprehensive account of its structure. A process typically describes an *idealized* set of phases and steps that is as comprehensive as possible. In performing the practice in a specific context, the process is often adapted to the specific circumstances. For example, a Customer Decision Journey

Table 2. Examples of design principles that entered design practice as it evolved to fit new economic paradigms.

Industrial Economy	Experience Economy	Knowledge Economy	Transformation Economy
Be creative	Be iterative	Be data-driven	Systemic solutions
Commoditize products	Be brand-driven	Personalized propositions	Be theme-driven
Be intuitive	Be people-centric	Contextualized propositions	Open-ended/Parametric propositions
	Be research based	Be co-creative	Decentralized propositions
		Centralized propositions	

process describes first the creation of an *AS-IS Customer Decision Journey* and then the creation of an *Envisioned Customer Decision Journey*. Yet in a specific project, it might make more sense to start with creating an envisioned journey right away because there is already enough information about the current journey available.

Design Method

A design method is a description of the structure of a specific activity, outlining the basic sequence or rules that make up single comprehensive activities within a practice. Methods function as mental tools as they provide structure for a designer's thinking and behavior. For example, the rules of brainstorming influence how participants in a brainstorm session behave (Osborn, 1957).

Design Template

A design template is a description of the structure of a design outcome, outlining the basic elements and lay-out for a deliverable. A template helps to directly shape the outcome of an activity. For example, a template for documenting ideas in a brainstorm session influences how those ideas are described and what kind of information is given about the idea. In this way, templates serve to ensure re-use of work and support retention to make sure all desired qualities of the outcome are being described.

Design Tool

A design tool is any piece of software or hardware that enables practitioners to perform their tasks or extends their capability to do so. Like a template, a tool directly influences the form and appearance of the outcome of a design activity. Tools can range from sticky notes that are used during workshops to visualization software to wire-framing tools for interaction design.

Staging

Staging refers to the use of information that links a methodological element to a specific context of use. Staging information is typically contextual in nature, in the sense that it provides an example of how specific methodological elements have been used in practice. The specific information is therefore often not directly transferable to other situations, yet it offers designers the chance to see how, in previous cases, methodology had been applied, easing the implementation of the project at hand.

Principles and Operational Procedures for Using ADD

The way that methodology has been framed so far goes beyond describing phases and steps. In aiming to shape or influence the mindset of its designers, methodology should describe practices in a richer manner, serving its multiple roles (Daalhuizen, 2014). For example, to help a diverse set of designers to effectively use a methodology on specific projects, it should describe *how* the specific practice might be staged in that context and *why* that is relevant and meaningful. For example, a methodology can be linked to its context of use by referring to one or more of the four *images of design thinking*, proposed by Kleinsmann, Valkenburg, and Sluijs (2017). Through such rich descriptions of a specific design practice, a methodology can help designers to create a comprehensive *method mindset* that helps to stage, execute and manage it effectively and efficiently. What are the basic principles for documenting methodology in such a way? In the section below, we present six principles that are useful when developing *rich design methodology*. We note that some of these principles might be rather straightforward, and some (good) methods reflect these principles already. They typically do so without the explicit application of the principles or the ADD framework. However, the authors have experienced that their explication supports method development as they keep a clear focus on the user of methodology throughout the method development process.

Simplify to Convince New Users of the Method

An important role of methodology is to introduce people to a way of working that is new to them. For example, they might be required to learn about a specific practice because they are expected to adopt it in a new project. Or they might want to learn about a practice because they encounter it as a stakeholder in projects. In order to facilitate a convincing introduction of a methodology to a new user, it needs to offer simple *access routes*. This means, for example, that designers can gain a quick overview of the methodology without having to understand all of the details. It also means that they should be able to quickly see how specific steps or phases are implemented in real projects and what kind of intermediate results they might expect along the way.

Enrich to Attract Experts

Another important role of methodology is to help experts update and/or sharpen their mastery of specific practices. For example, an expert might want to check whether any new methodology or tools have emerged in the recent past that should be included in his or her repertoire. An expert might also want to search for, or share, new adaptations in use of existing methods or tools. In order to seduce experts to do so, methods should be rich enough to satisfy their detailed understanding of a practice and inspire them to try new ways of working.

Modularize to Stimulate Adaptation

Practices are continuously evolving, and methods should be adaptable to specific or new circumstances. For example, the inclusion of new disciplines in a certain type of practice might require changes in the process. Likewise, a change towards more agile ways of working might require new or different roles in project teams. Methodology should support adaption to change by presenting it as a means to an end, not as an end in itself. Modularization of methodology allows designers to see how it is built up out of elements that might be changed, altered, sequenced differently or even ignored according to the circumstances.

Share to Facilitate Co-creation

Design and innovation are about co-creation, meaning practitioners who can share how they work and draw contributions from other disciplines have an advantage. Through a shared way of working, co-creation becomes more effective. People who can easily grasp what is going on in projects and can see what needs to be done will be more willing to participate, create, initiate and take responsibility. Co-creation can become more productive, and more pleasant.

Involve to Ensure Buy-in

Being an integrative discipline, design processes inherently need the buy-in of many different stakeholders. Methodology that explicitly describes when and how stakeholders should be involved early on in the process will have a higher chance of ensuring buy-in.

Show to Catalyse Cross-disciplinary Collaboration

Methodology that is specifically designed to involve stakeholders that are not necessarily experts in the process will have an advantage. This can be accomplished by using visual tools and templates around which stakeholders can inform, discuss, and contribute.

Approach for Applying the ADD Framework

The ADD framework is intended to be used in a co-creative setting, where all relevant practitioners are involved in transforming a best practice into a rich methodology. The relevant people can be involved in each stage of the process, whether to provide input, feedback, or approval. The approach for applying the ADD framework to transform a best practice into a methodology follows four steps: deconstruct, synthesize, iterate, and deliver (see Figure 4).

Deconstruct Practitioners collect as much available documentation as possible that describes elements of the practice. Relevant information can be of a formal nature, like process descriptions, methods or published case examples; or it can be of an informal nature, like notes on the specific practice or application examples from previous projects or templates produced by individual employees. This is typically done by the so-called owners or champions of the practice, who are commonly already involved in the initiative to capture and document the practice from the start. A methodology owner or champion is a person in the organization that is responsible for a specific design practice or has most experience with it. It is usually the person with most expertise in the specific area. This person is also involved in making a list of key experts and relevant stakeholders that are affected by or to use the outcomes of the practice. These people are involved in gathering material about the Customer Decision Journey (CDJ) practice or help with evaluating and approving the CDJ use along the way.

The practice owner or champion will identify relevant people in the organization that work with the practice and will ask them to share any relevant information about the practice. The collected material is then deconstructed using the ADD framework. Deconstruction is typically led by the researcher involved, who has been familiarized with the ADD framework. The researcher should have affinity with design methodology and working with design processes. The collected information is analyzed and broken down into methodological elements following the definitions as described in the previous section. If needed, bit-sized information from documents or slide decks is transferred, perhaps via sticky notes or in a digital format. Additionally, with explicitly documented information, it is also relevant to elicit tacit knowledge from key experts. This is commonly done through interviews where the collected material can be used to prompt the experts, and experts are asked to describe the practice from their perspective. The deconstruction step results in a collection of methodological elements, documented on paper or in digital format, and categorized according to the type of elements (process, method, tool, staging, etc.).

Synthesize All methodological elements are placed on a poster according to type of element and when they typically play a role during a project. That is, they are organized according to their *logic of use* as well as their type of methodological content. Together, these elements start to form a draft of the rich methodology, which we call a *useflow* (see also Figure 2). A useflow is defined as a visual organization of the methodological elements of a practice both along their logic of use (horizontal axis) and type of element (vertical axis). Some elements might be placed multiple times along the useflow.

The synthesis step is typically organized as a workshop, where the participants can work with the material and place elements on a large poster. In the workshop, participants are first asked to collectively place the elements and to identify either conflicting placements of elements, as well as gaps in the useflow. The elements that participants disagree on are kept separate. Once the elements have been placed, the facilitator will focus on the remaining elements, where participants are urged to come to agreement. The facilitator then brings up the identified gaps one by one, when participants brainstorm about potential sources for the missing information, or if no source can be identified how the missing information can be generated.

It is important to involve practitioners who have the most experience with the practice, as they are most likely to know how the elements should be organized. It is likely that disagreement will occur about the exact placement of some elements, and discussion between participants is needed to come to agreement.

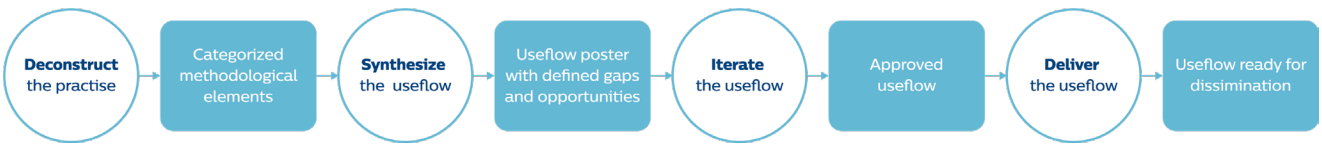

Figure 4. Operational procedure for applying the ADD framework.

During this step, it is also important to elicit as much tacit knowledge as possible. To do so, participants are encouraged to identify where they miss elements and to write them down. Practitioners that have relevant experience but are not present in the workshop can be interviewed separately, with the draft useflow as a prompt. A full draft of the useflow is created from the workshop input, typically by a researcher. The draft is created as a sharable (digital) document that can be sent to all relevant stakeholders for validation and additional input and feedback.

Iterate After a draft has been created, external stakeholders are invited to evaluate the useflow and perform a gaps and opportunity analysis. External stakeholders are those actors in the organization whose work is affected by the practice, either because they need to provide input, or because they need to use the outcomes of the practice. They review the draft and identify gaps in the flow, defined as missing methodological elements on any of the levels of abstraction. This step is also typically organized as a workshop. At this point, additional material can be gathered or new material can be created where none is available. The useflow is then adapted based on the participants' reflections and input. A new version can be brought into a new workshop to further refine the methodology together with the stakeholders. Alternatively, it can be circulated and stakeholders can provide feedback and/or input individually. It is important to emphasize here that the aim is to come to a *satisfying* result that is usable and useful to the stakeholders, rather than striving for an optimal result. That is, as the practice is likely to evolve continuously with new methodological elements being created over time, it is not possible to strive for the *perfect* methodology, but rather for a methodology that is flexible enough to adapt over time.

Deliver Once a satisfying useflow has been created and the practice owner or champion is satisfied, it is signed off on by the project sponsor. It is then formatted and laid-out to be accessible, usable and visually attractive following standard graphic design principles, as to create a low barrier for use.

Illustrating the Framework: Documenting the CDJ Practice

In the following section, we will illustrate the use of the methodology framework by showcasing how it was applied to capture the Philips Design Customer Decision Journey (CDJ) practice.

The Customer Decision Journey Practice at Philips

The CDJ methodology supports practitioners to gain insight in consumers' context of use and behaviors. In addition to learning about consumers, the CDJ gives insight into touch-points that consumers encounter while interacting with a brand. The CDJ reveals the competences, processes and technologies needed to enable those touch-points for the development of future propositions. In turn, the enabled touch-points can provide a desired brand experience. The framework is used to bring together information about the practice and structure, and to assess the information available in the company across different projects and coming from various employees. All information is analyzed and broken down into its methodological elements and mapped into a useflow. Where possible, the methodology is enhanced based on the insights gained by the team performing this activity.

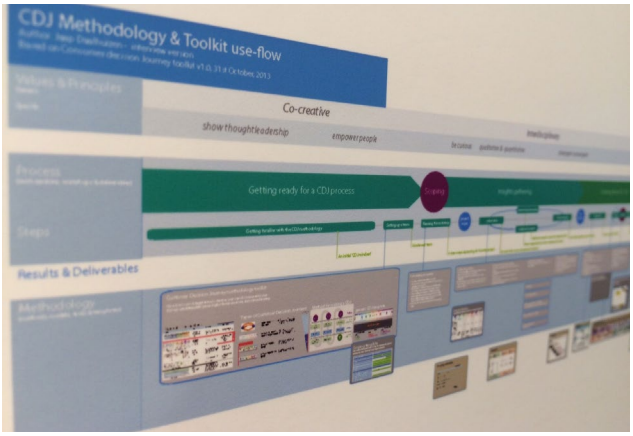

Figure 5. Example of the CDJ methodology useflow.

Starting Situation & Gathering Initial Input

A team of practitioners from Philips and a researcher set out to document the CDJ practice with the aim to allow a broader set of employees at Philips to become aware of the practice and learn how to use it. Upon the start of this project, CDJs had been used in Philips for some years, with successful projects as a result. Several practitioners in the company were considered experts on its use; they had the most experience with the practice from a variety of projects across different hierarchical levels. In this case, they had already gathering material about the CDJ practice.

Deconstructing the CDJ Practice

First, all available material was collected from all relevant stakeholders in the company. This happened by sending out a call for material to all employees who were known to have experience with the CDJ practice. The categories of the ADD framework were used to prompt the employees to send information across a rich spectrum. Key experts on the practice were interviewed to capture tacit insights about the practice, how it had been performed in the past, and why it had been successful. They were asked to describe the practice overall, in terms of its value to the company, as well as its values and principles. Furthermore, the methodology owner was interviewed to gather the most important insights about the CDJ practice.

All abovementioned information was collected and printed out or written down on pieces of paper or sticky notes. This initial stage resulted in information about the CDJ practice, as it had been applied in various projects by different employees, but it was rather unorganized in terms of how when, where, how and why the bits of information were used and how they related to each other. The next steps were aimed to first deconstruct and organize the information and then synthesize them into a coherent description of the practice in the form of rich methodology using the ADD framework.

1. The ADD framework was used to deconstruct the available material into methodological elements of the CDJ. Material from PowerPoint slide decks, documents, interviews, etc., was analyzed by the researcher and broken down into pieces that fit the framework categories. For example, a slide deck containing material on the CDJ practice was analyzed to determine whether information elements were process steps, tools, templates, values, and so on. Methodological elements were written down on post-it notes or printed out on individual pieces of paper. For example, one slide contained information about a rule of thumb for the amount of time spent on collecting, structuring, and conducting research (90%) versus the time spent on making a visualization in the form of a poster (10%), see Figure 4.
2. This bit of information was categorized as belonging to the category of staging information, as it provided team members practical support as to how to plan their time when creating and visualizing the CDJ. Alternatively, analysis of a slide about deriving insights from collected data and notes from an interview with the methodology owner contained information that could be integrated into a method (see Figure 5). The method prescribed the activities needed to go from raw data to insights.

At this point, the ADD framework prompted the participants to include an application example to make it easier to use this method. The example illustrated how a particular insight was created from a bit of raw data (Figure 6) and shows how a *laddering* technique can be used to derive insights as described in step 2 of the method. Similarly, the method was linked to one of the key values for the CDJ practice as it prescribes in step 3 that one should focus on the *human element* of each insight (as opposed to the technological element), which corresponds to the value to be *people-centric* throughout the creating of the CDJ. This people-centricity also comes back into the example in Figure 6, where the laddering technique shows how it can get deeper and deeper insight into the customer's motivations. The examples above indicate how methodological elements at different levels of the ADD framework can help to enrich the methodology and enhance its usability.

Synthesizing the CDJ Useflow

The second step was to organize the methodological elements along a useflow, where some elements were placed multiple times. In this step, it was crucial to involve as many relevant stakeholders as possible. This step was organized as a workshop at the start of which principles for rich design methodology were presented, and a general introduction was given to the purpose and goals of the project and the workshop. The participants were able work with the material and place it on a large poster. To do so, a large poster was printed, with the different levels of the ADD framework represented horizontally. The key process steps and events in the CDJ practice were then identified and linked together (Figure 7). This version of the useflow depicted the phases and steps of the CDJ practice, as well as the types of activities and deliverables. For example, the CDJ practice typically involves a number of key workshops that form the backbone of the process and were presented as an integrated part of the CDJ process. Presenting the useflow with integrated workshops as part of the process exemplifies the rich nature of the ADD framework, where methods typically do not include this type of practical information. Finally, the researcher organized all of the methodological elements on the poster to draft a first version of the CDJ useflow.

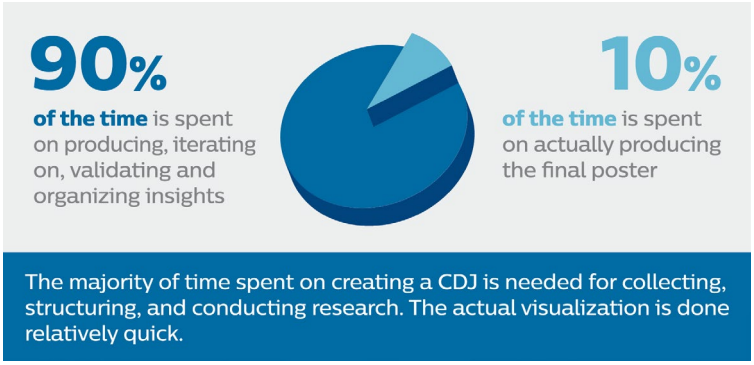

Figure 6. Example of staging information:
a rule of thumb for the time to be spent on collecting and organizing insights versus making the visualized CDJ poster.

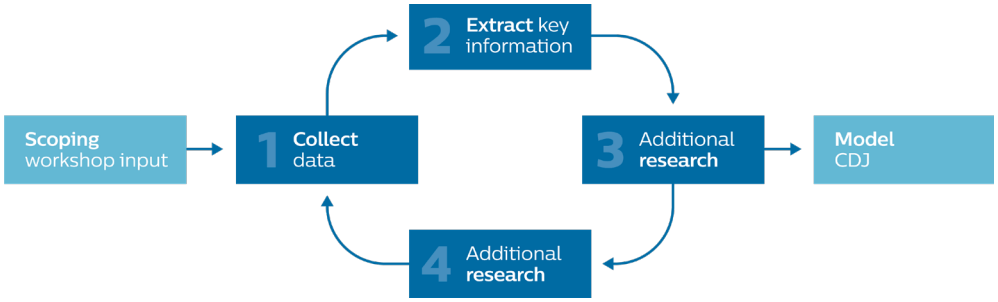

Figure 7. Example of method information: description of the steps needed to derive insights from data.

Figure 8. Illustrative example of the laddering technique that was added to support the method for deriving insights from data.

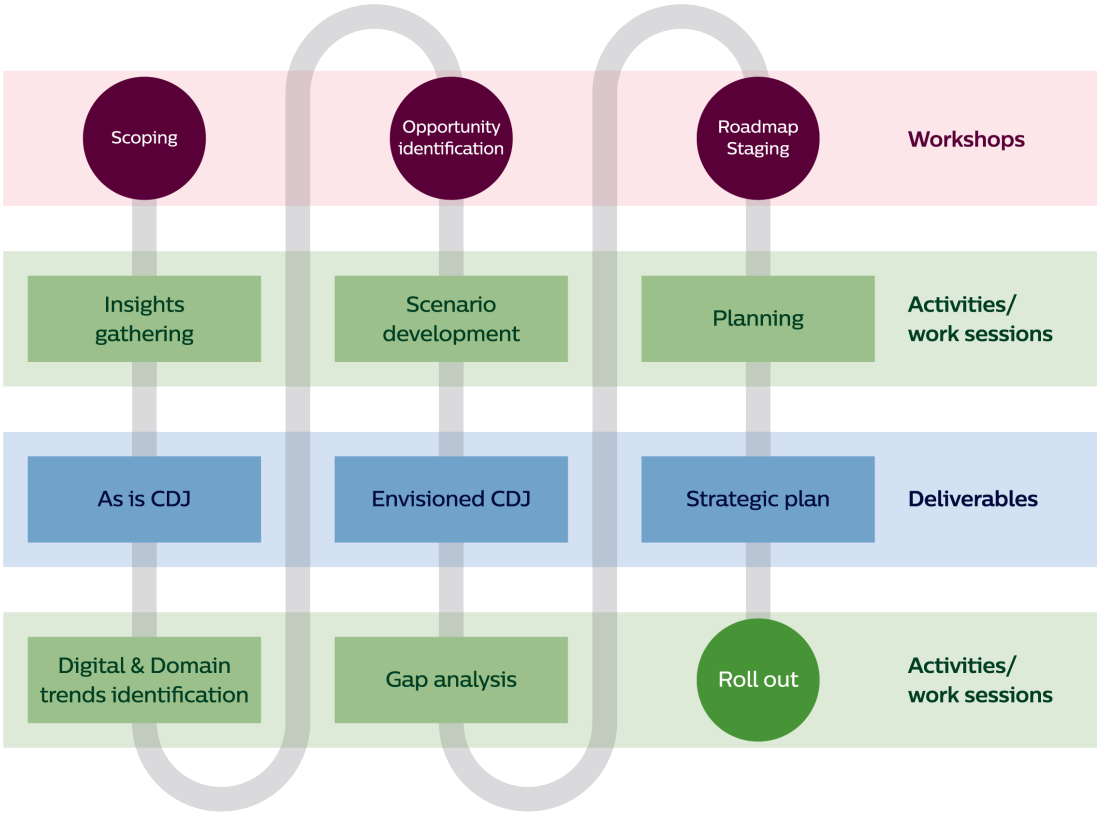

Figure 9. A visualization of the useflow on process level of the CDJ process.

Iterating the Useflow

After the initial version of the CDJ useflow was synthesized, it was evaluated by the group of experts and stakeholders identified earlier who identified gaps where information was still missing. For example, the useflow on the poster clearly showed that certain steps were not yet supported by a method, tool or template. In this case, the participants either identified where missing information could be collected or how they could develop new material to fill the gap. The ADD framework supported the identification of gaps by making it easier to identify them both horizontally (missing methodological elements along the flow of use) or vertically (missing methodological elements on different levels of abstraction for a certain step in the useflow). Furthermore, during the evaluation, stakeholders also identified opportunities for how the methodology could still be improved. For example, a specific template to support a step was available but needed to be improved to be more effective. Similarly, stakeholders also indicated that there were better examples than the ones collected so far, and suggested to include these in the useflow. In this illustrative case, the evaluation happened as part of the synthesis workshop, but it is also possible to organize a separate workshop for this purpose.

Based on the identification of gaps and opportunities, additional material was gathered and the useflow was adapted based on the participants' reflections. The core team of practitioners and researcher collected all input from the workshop and changed and updated the useflow accordingly. Then, the new version was send back to the workshop participants for feedback and approval.

Delivering the CDJ Useflow

Once a satisfying useflow was produced, all key stakeholders were asked to give final approval before the useflow was finalized. The way a methodology is finalized depends on the mode of presentation in the company. For example, a company might wish to present the methodology on an intranet site with interactive elements, or it might want to create a physical poster or booklet. In the case of the CDJ, useflow was finalized in terms of lay-out and graphic design and a list of content elements was created. This list contained all material presented on the poster in the original format and size with references to the useflow.

Discussion

Design organizations need to balance agility and flexibility with effective organizational learning across projects (see Cooper & Sommer, 2016; Rigby et al., 2016). As they operate in a continuously changing context, new ways of working are developed, shared, and adopted continuously. Thus, design practitioners need to share and adopt such best practices to contribute to their organization's success and competitive edge. The ADD framework was developed to support design practitioners and their managers in the process of capturing and sharing best practices in a way that allows for fast learning and flexible use.

The ADD framework was applied in a co-creative setting to capture and document a number of key practices at Philips. First, it was applied in a way that aimed to elicit as much tacit and explicit knowledge about these practices as possible from experts in the company. In this *elicitation phase*, those experts described the practices along the flow of use along which they typically occur and organized the different methodological elements along this flow. The framework also helped those experts to think about the practice on different levels of abstraction. By distinguishing between values, principles, process, methods, tools, templates and staging, it triggered a richer discussion about the practice, as opposed to focusing solely on the process level, which is how methods are typically designed (Dorst, 2008).

The framework was applied to organize knowledge that was elicited in a structured and coherent manner. In this *documentation phase*, the framework helped the stakeholders to organize the elicited knowledge into different categories, using the definitions provided through the framework. On a practical level, the set of definitions was useful in establishing a shared understanding amongst stakeholders and to determine how to classify the different methodological elements. During the introduction of the framework, it was emphasized that the set of definitions ought to be seen as a set of *working definitions* that were not necessarily undisputable, but their acceptance by all stakeholders would make it easier to focus on documenting the practice in an acceptable way. It was emphasized during this process to keep focus on attaining a satisfying description of the practice and not to aim for an optimal result. This points to the idea that design practices are always in flux, and that a useful methodology ought to mimic that fluid nature, similar in concept to the *perpetual beta* state from the software development community, which refers to software that can be changed or complemented for an indefinite period of time. Furthermore, the framework supported the documentation of methodology in a way that promoted flexible use, connecting process-level information (like steps and phases of the practice) to its underlying mindset as well as to typical context of application. Methodological information was connected *vertically* to the mindset and staging along the flow of use of the method. In turn, this vertical connection facilitated adaptation of the methodology when new tools become available or new steps introduced. The resulting methodology promoted continuous development of the practice and subsequent changes to the methodology.

The case presented in this paper is illustrative with the purpose of showing a possible application of the ADD framework to capture and document a specific practice in a company. Empirical testing of the framework is still reserved for future work.

New methods are often based in best practices, and this is also true for the illustrative case presented in this paper. Expert knowledge as a source for method development is common, yet not without criticism. Vermaas coined this as the "expert position" in design research (Vermaas, 2016, p. 1) and has pointed out that using expert designers as a source for new method development is not without problems. One of the key issues is the need for empirical testing of methods. That is, while expert knowledge might be a valid source for methods, it is not necessarily a valid

justification for the method's efficacy in driving innovation. There is a need—at least from an academic point of view—to empirically test methods' intended effects. In this light, the ADD could also offer support, at it distinguishes the different elements a method consists of and provides a typical context of use and appropriate mindset. This information will be an asset in designing valid empirical tests.

From a practical perspective, the use of the ADD requires a rather open minded attitude from stakeholders that are involved in the process, who accept that documenting practices in the form of methodology will not result in a definite description of that practice, but will remain in flux itself.

Furthermore, the concept of *useflow* implies a more or less shared understanding of the way a practice is ideally performed. Of course, in reality, there might be several slightly different ways to perform a practice in a productive manner and individual differences in the way methods are being experienced and used (Daalhuizen et al., 2014), and some disagreement and discussion are likely to arise in the process of documenting any practice. In this context, it was emphasized to the stakeholders involved that the overall aim was to help shape designers' mindset of the methodology to help build an appropriate mental framework for its execution, in the way discussed by Andreasen (2003).

The framework is in line with other research efforts to investigate the role of design methodology. For instance, the five qualities of design tools as put forward by Dalsgaard (2017) can complement the ADD framework by adding a layer of information that indicates the different roles methodological elements can have.

Conclusion

This paper has established a framework for the documentation and communication of new or best practices in design in the form of *rich* design methodology. The framework, dubbed *architecture of design doing* serves to support practitioners and researchers with capturing and expressing best practices and new ways of working in the form of design methodology that is easy to use and flexible enough to be adapted to changes in the innovation landscape. The aims of the framework are to support capturing, documenting and communicating design methodology in a *rich format* to create a methodology that is (1) consistent and flexible, (2) user-centered, and (3) aimed at learning and continuous development of the methodology.

Design methods are a key outcome of design research (Blessing & Chakrabarti, 2009), translating research insight into practical tools to support industry, yet few methods are adopted by industry on a broad scale (Andreasen, 2011; Badke-Schaub et al., 2011; Dorst, 2008). A key underlying reason for this has been the strong focus on process alone, at the expense of connecting methodology to how practices and methods relate to the organizational context, the design task, the designer (Dorst, 2008) or to the mindset that is required for appropriate use of the method (Andreasen, 2003). This often leads to methods that are hard to use, inflexible, and/or static. Furthermore, the framework supports the development of design methodology that is adaptable to a changing context of application. This is particularly important as a firm's environment is continuously changing, including its assumptions about what constitutes value creation. Therefore, the method and tools that support practitioners need to be adaptable.

The ADD framework establishes different levels of abstraction at which practices can be described, connecting high-level values and principles that drive decisions and a style of working across an organization. This produces concrete methods, tools, and information that supports practitioners to *stage* and manage concrete activities in specific projects. Overall, the framework supports practitioners and researchers in capturing and expressing dynamic capabilities (popularly termed *best practices*) in a rich, context-sensitive way, allowing others to learn and add to or change those *practices* more easily.

The framework has several implications for design practice. First, the use of the ADD framework results in a visual representation of a practice, in the form of *rich* methodology. Its visual nature eases communication for relevant designers and stakeholders when, for example, informing and inspiring non-design stakeholders. Second, providing employees with rich descriptions of best practices through documenting and sharing methodology is useful for them to reflect on their own way of working and facilitate adapting it wherever necessary. Third, even for experienced practitioners, explicitly documented methodology can help to serve as a reminder or *sounding board* to sharpen skills and mindsets. Fourth, a coherent methodology can help to position new, emerging tools, methods or templates within the framework of an existing practice and can inspire people to integrate those in their existing ways of working. It can do so whilst reassuring its designers that not all existing knowledge and experience will be thrown overboard with the introduction of a new tool or method. Fifth, having specific practices captured in the form of methodology toolkits allows organizations to scale up their innovation efforts when needed in a cost-effective way.

Successful management of dynamic capabilities like product development offer important routes to a firm's competitive advantage (Eisenhardt & Martin, 2000). Therefore, it is imperative that organizations manage the development and adoption of both new and best practices, particularly in highly dynamic markets. In this paper, we argued that the development and communication of methodology is a productive way of doing so, yet only if methodology is well-balanced in terms of being agile and flexible (adaptable, contextual, rich) as well as being easy to adopt and learn across projects and stakeholders. To do so, the content and structure of methodology needs to include information ranging from an organization's basic beliefs about what constitutes value creation all the way to practical, contextualized insights that ground a practice in reality. Moreover, methodology needs to be documented and communicated in a way that invites and empowers change as the organization adapts and anticipates a changing innovation landscape. The ADD framework aims to support this process.

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